Specification Amendments:

Please amend the specification as indicated to incorporate claimed subject matter. No new subject matter has been added to the specification.

Please replace the paragraph on page 5, beginning at line 14 of the specification with the following:

B1

When the process reaches the decoder end of frame step, at 395, if the frame has finished, the process initializes the frame encoder, at 410, which will start to encode a macroblock, at 420. If the current macroblock has no motion vectors (determined at step 430), then the macroblock is read, at step 470, from the downscaled and decompressed frame created during the decoding process, and each block in the macroblock undergoes a discrete cosine transform, at step 480. If the current macroblock has motion vectors (determined at decision step 430), the four sets of neighboring motion vectors are retrieved from storage, at 440, and are used to build the original image frame, at steps 450 and 460. In this example, note that scaling of ½ x ½, is used. Retrieval of more motion vectors for other scale factors would be required. For example, if scaling by 1/3 x 1/3, 9 motion vectors would be used. If scaling is by 2/5 x 2/5, between 4 to 9 motion vectors would be used, depending on how the resultant motion vector is generated. <u>In a specific embodiment, a control input of the system is used to set interger values of s and t, where t is an integer greater than zero, and s is an integer greater than zero but less than t. The resulting image represented by the downscaled and decompressed video stream is s/t of the size of the image represented by the compressed video image stream.</u>

Please replace the paragraph on page 5, beginning at line 25 of the specification with the following:

B2

The new motion vector, at 450, can be built in multiple ways. In one method, one may choose to use a simple averaging modulo ½ of each component of the vectors from each of the four sets of motion vectors. In an alternate embodiment, one may choose the most frequently occurring motion vector (ΔX_k, ΔY_k) from each set of kth-motion vectors, with an arbitrary method for breaking ties. One possible method of

B^2

breaking ties is to choose the element that is closest to the top left motion vector. In another embodiment the tie breaking function uses a random method to select among the candidate motion vectors. In yet another embodiment, the tie breaking function uses a predetermined pattern of choices to select among candidate motion vectors.